

Chapter 15

Why Game-Based Learning Did Not Achieve What It Could Achieve: Challenges and Success Factors

Wee Hoe Tan

Sultan Idris Education University, Malaysia

Sean Neill

University of Warwick, UK

Sue Johnston-Wilder

University of Warwick, UK

ABSTRACT

This chapter investigates the reasons behind the attitude differences of professionals involved in Game-Based Learning (GBL). Semi-structured interviews were conducted between October 2009 and March 2010 with 11 Subject Matter Experts (SMEs) and 11 game experts in the UK. The interviews aimed to explain why the professionals' attitudes were statistically significantly less positive when comparing what GBL could ideally achieve and what it usually achieves. The negative experience encountered by the interviewees is the key reason of the attitude differences. The accountability culture of UK education diminished SMEs' confidence in GBL practice, and the condition was further impaired with the lack of good quality games. Time constraints, online security for minors, and teachers' lack of understanding about games were also the challenges faced by the GBL practitioners. Meanwhile, 5 factors of positive GBL practice were identified in the study (i.e. flexibility, use of media-rich resources, positive attitude towards new teaching methods, trendy learning strategies, and maturation of GBL systems). Based on the positive and negative experiences shared by the interviewees, the chapter proposes a guideline for ideal GBL practice, which highlights how successful GBL practice could be replicated and how failed attempts could be avoided.

DOI: 10.4018/978-1-4666-6102-8.ch015

INTRODUCTION

Game-Based Learning (GBL) is a young and growing field of study where academic and commercial researchers who study a similar topic might possess very different backgrounds, perspectives and agendas. Tan, Johnston-Wilder and Neill (2010) delineated GBL literature into academic research publications and game experts' writings on creative productions in order to examine the implication of different perspectives in comprehending GBL issues. They highlighted that a positive attribute of games such as engagement could be seen as addiction by game experts in the game industry. Therefore, ignoring the differences in attitude and perception between academics and game experts could lead to 'reinventing the wheel'. So for those who intend to study games, learning from researchers in both academia and the game industry is essential. The outcomes of research into clarifying the differences between academics and game experts could optimize their strength in GBL practice and game production while complementing each other. This idea was highlighted by Kiili (2005) when he emphasized the need for integrating educational theories and game design principles in order to create meaningful and engaging educational games.

This paper is a sequel of an article titled "How do professionals' attitudes differ between what game-based learning could ideally achieve and what is usually achieved." Tan, Neill and Johnston-Wilder (2012) compared the results of two surveys conducted with 45 subject matter experts (SMEs) and 41 game experts in the UK, in which they examined the attitude and attitude differences of the participants towards teachers who use games in the classroom and studios that produced educational games. They discovered that the respondents' attitudes were statistically significantly less positive—comparing ideal conditions to usual practice—for the issues they studied. The SMEs were unaware of the problems faced by educational game studios, which Tan et al. (2012) claimed to be the cause

of a scenario where games are made fun at the expense of learning outcomes or vice versa. In issues related to educational games, the SMEs were found to be certain only about aspects that relate directly to teaching and learning while the game experts were confident only for game design and development. The findings revealed through the surveys could shed light only on the issues of why the potential of GBL was not exploited well in usual practice. The reasons behind the attitude differences were left unanswered in the article, hence the origin of this paper—to explain why the attitudes of the SMEs and the game experts differed between what GBL could ideally achieve and what is usually achieved.

Subject Matter Experts and Game Experts

This chapter considers teachers in schools and academics in institution of higher education as SMEs in the contexts of GBL. The experts could be regarded as professionals with expertise in the field of education but usually without technical game production knowledge. In addition, they are the experts "*who know about the subject matter required to be covered in the game and have experience of actually teaching it to students; who know what learning objectives are and what areas the students are likely to find difficult*" (Whitton, 2010, p. 139).

In contrast, game experts are professionals with expertise in the field of game production. They can be broadly classified based on the nature of games they produce, such as leisure games and serious games, and each of the game types can be further subdivided into other categories based on the contexts where the games are played for fun or used for serious purposes. The term "game experts" is chosen instead of "game practitioners" in GBL contexts because the notion of "practice" in game could be misunderstood as a form of game playing or game coaching activity (Tan, 2013), as opposed to game production.

15 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:
www.igi-global.com/chapter/why-game-based-learning-did-not-achieve-what-it-could-achieve/110066

Related Content

Designing for a Production-Oriented Approach to Blended Learning in English Language Teaching

Siliang Fu (2022). *International Journal of Technology-Enhanced Education* (pp. 1-16).

www.irma-international.org/article/designing-for-a-production-oriented-approach-to-blended-learning-in-english-language-teaching/316457

The Infusion of Technology Within the Classroom Facilitates Students' Autonomy in Their Learning

Fariel Mohanand Garry Soomarah (2019). *Advanced Methodologies and Technologies in Modern Education Delivery* (pp. 380-394).

www.irma-international.org/chapter/the-infusion-of-technology-within-the-classroom-facilitates-students-autonomy-in-their-learning/212827

A Textbook Transformation Project: Open Access Materials With an International and Interdisciplinary Focus for Spanish

Federica Goldoniand Stacy Rusnak (2020). *Open Educational Resources (OER) Pedagogy and Practices* (pp. 140-159).

www.irma-international.org/chapter/a-textbook-transformation-project/243310

The Impact of Language Use and Academic Integration for International Students: A Comparative Exploration Among Three Universities in the United States and Western Switzerland

Michelle L. Amosand Rachel C. Plews (2019). *International Journal of Technology-Enabled Student Support Services* (pp. 1-13).

www.irma-international.org/article/the-impact-of-language-use-and-academic-integration-for-international-students/244207

The Impact of Language Use and Academic Integration for International Students: A Comparative Exploration Among Three Universities in the United States and Western Switzerland

Michelle L. Amosand Rachel C. Plews (2019). *International Journal of Technology-Enabled Student Support Services* (pp. 1-13).

www.irma-international.org/article/the-impact-of-language-use-and-academic-integration-for-international-students/244207